Canon

EOS REBELT3 EOS 1100D



The "Software Start Guide" and "Quick Reference Guide" are provided at end of this manual.

INSTRUCTION MANUAL

Advanced Shooting

This chapter builds on Chapter 3 and introduces more ways to shoot creatively.

- The first half of this chapter explains how to use the <Tv><Av><M> <A-DEP> modes on the Mode Dial.
- All the functions explained in Chapter 3 can also be used in the <Tv>, <Av>, and <M> modes.
- To see which functions can be used in each shooting mode, see page 232.
- The ☆ mark shown on the right of the page title indicates that the function is available only in Creative Zone modes (p.22).

» 1/125

F8.0

-3..2..1..0..1..2.:3

The pointer icon < ✓ > displayed together with the shutter speed, aperture setting, or exposure compensation amount indicates that you can turn the < △ > dial to adjust the respective setting.

Ty: Action Shots

You can either freeze the action or create motion blur with the < Tv > (Shutter-priority AE) mode on the Mode Dial.

* < Tv > stands for Time value.



Blurred motion (Slow shutter speed: 1/30 sec.)



Frozen action (Fast shutter speed: 1/2000 sec.)



Set the Mode Dial to <Tv>.





Set the desired shutter speed.

- See "Shooting Tips" for advice on setting the shutter speed.
- Turning the < 2 > dial to the right sets a faster shutter speed, and turning it to the left sets a slower one.

Take the picture.

When you focus and press the shutter button completely, the picture will be taken at the selected shutter speed.



Shutter Speed Display

The LCD monitor displays the shutter speed as a fraction. However, the viewfinder displays only the denominator. Also, "0"5" indicates 0.5 sec. and "15"" is 15 sec.

എ∈ Shooting Tips

- To freeze the action or moving subject.
 Use a fast shutter speed such as 1/4000 sec. to 1/500 sec.
- To blur a running child or animal giving the impression of fast movement.

Use a medium shutter speed such as 1/250 sec. to 1/30 sec. Follow the moving subject through the viewfinder and press the shutter button to take the picture. If you use a telephoto lens, hold it steady to prevent camera shake.

- How to blur a flowing river or water fountain. Use a slow shutter speed of 1/30 sec. or slower. Use a tripod to prevent hand-held camera shake.
- Set the shutter speed so that the aperture display does not blink in the viewfinder.

If you press the shutter button halfway and change the shutter speed while the aperture is displayed, the aperture display will also change to maintain the same exposure (amount of light reaching the image sensor). If you exceed the adjustable aperture range, the aperture display will blink to indicate that the standard exposure cannot be obtained.





If the exposure will be too dark, the maximum aperture (smallest number) will blink. If this happens, turn the < \leq > dial to the left to set a slower shutter speed or increase the ISO speed.

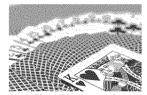
5 Using the Built-in Flash

To obtain a correct flash exposure, the flash output will be set automatically (autoflash exposure) to match the automatically-set aperture. The flash sync speed can be set from 1/200 sec. to 30 sec.

Av: Changing the Depth of Field

To blur the background or to make everything near and far look sharp, set the Mode Dial to < Ay > (Aperture-priority AE) to adjust the depth of field (range of acceptable focus).

* < Av > stands for Aperture value which is the size of the diaphragm hole inside the lens.



Blurred background (With a low aperture f/number: f/5.6)



Sharp foreground and background (With a high aperture f/number: f/32)

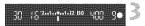




Set the Mode Dial to < Av >.

Set the desired aperture.

- The higher the f/number, the wider the depth of field where sharper focus is obtained in both the foreground and background.
- Turning the < 2 > dial to the right will set a higher f/number (smaller aperture opening), and turning it to the left will set a lower f/number (larger aperture opening).



Take the picture.

Focus and press the shutter button completely. The picture will be taken with the selected aperture.



Aperture Display

The higher the f/number, the smaller the aperture opening will be. The apertures displayed will differ depending on the lens. If no lens is attached to the camera, "00" will be displayed for the aperture.

-⊚ Shooting Tips

When using an aperture with a high f/number, note that camera shake can occur in low light scenes.

A higher aperture f/number will make the shutter speed slower. Under low light, the shutter speed can be as long as 30 sec. In such cases, increase the ISO speed and hold the camera steady or use a tripod.

The depth of field depends not only on the aperture, but also on the lens and on the subject distance.

Since wide-angle lenses have a wide depth of field (range of acceptable focus in front of and behind the point of focus), you need not set a high aperture f/number to obtain a sharp picture from the foreground to the background. On the other hand, a telephoto lens has a narrow depth of field.

And the closer the subject, the narrower the depth of field. A farther subject will have a wider depth of field.

Set the aperture so that the shutter speed display does not blink.

If you press the shutter button halfway and change the aperture while the shutter speed is displayed. the shutter speed display will also change to maintain the same exposure (amount of light reaching the image sensor). If you exceed the adjustable shutter speed range, the shutter speed display will blink to indicate that the standard exposure cannot be obtained.





If the picture will be too dark, the "30"" (30 sec.) shutter speed display will blink. If this happens, turn the < 2 > dial to the left to set a lower aperture f/number or increase the ISO speed. If the picture will be too bright, the "4000" (1/4000 sec.) shutter speed display will blink. If this happens, turn the < 2 > dial to the right to set a higher aperture f/number or decrease the ISO speed.

4 Using the Built-in Flash

To obtain a correct flash exposure, the flash output will be set automatically to match the set aperture (autoflash exposure). The shutter speed will be set automatically between 1/200 sec. - 30 sec. to suit the scene's brightness.

In low light, the main subject is exposed with the automatic flash, and the background is exposed with a slow shutter speed set automatically. Both the subject and background look properly exposed (automatic slow-speed flash sync). If you are handholding the camera, keep it steady to prevent camera shake. Using a tripod is recommended. If you do not want a slow shutter speed to be used, set [2: Flash sync. speed in Av mode] to [1: 1/200-1/60 sec. auto] or [2: 1/200 sec. (fixed)] in [4: Custom Functions (C.Fn)] (p.218).

MENU Depth of Field Preview*

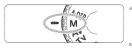
The aperture opening (diaphragm) changes only at the moment when the picture is taken. Otherwise, the aperture remains fully open. Therefore, when you look at the scene through the viewfinder or LCD monitor, the depth of field will look narrow. With the procedure below, you can check the depth of field before taking the picture.

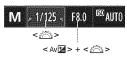
- Enable depth-of-field preview to be used.
 - Under [¥: Custom Functions (C.Fn)], set [8: Assign SET button] to [5: Depth-of-field preview] (p.222).
 - For details about Custom Function settings, see page 216.
- \mathbb{Z} Exit the menu.
 - Press the <MENU> button two times to exit the menu.
- Press < (ET) >.
 - > The aperture will be stopped down so you can see the depth of field.
- While looking at the Live View image (p.122) and holding down the < (sir) button, you can change the aperture and see how the depth of field changes.

M: Manual Exposure

You can set both the shutter speed and aperture manually as desired. While referring to the exposure level indicator in the viewfinder, you can set the exposure as desired. This method is called manual exposure.

* < M > stands for Manual.





Standard exposure index



Exposure level mark

¶ Set the Mode Dial to <M>.

Set the shutter speed and aperture.

- To set the shutter speed, turn the < All Shares of the shutter speed, turn the
- To set the aperture, hold down the < Av

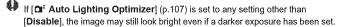
 → button and turn the < → > dial.

Focus the subject.

- Press the shutter button halfway.
- The exposure setting will be displayed in the viewfinder.
- The exposure level mark <1> indicates how far the current exposure level is from the standard exposure level.

Set the exposure and take the picture.

- Set the shutter speed and aperture as desired.
- If the exposure set exceeds ±2 stops from the standard exposure, the end of the exposure level indicator will display < ♠> or < ▶> in the viewfinder. (On the LCD monitor, if the exposure level is higher than ±3 stops, the < ■> icon will blink at where <-3> or <+3> is displayed.)



4 Using the Built-in Flash

To obtain a correct flash exposure, the flash output will be set automatically (autoflash exposure) to match the manually-set aperture. The flash sync speed can be set from 1/200 sec. to 30 sec. and bulb.

BULB: Bulb Exposures



Elapsed exposure time

A bulb exposure keeps the shutter open for as long as you hold down the shutter button. It can be used to photograph fireworks, etc.

In step 2 on the preceding page, turn the < >> dial to the left to set <BULB>. The elapsed exposure time will be displayed on the LCD monitor.



- During bulb exposures, do not point the lens toward the sun. The sun's heat can damage the camera's internal components.
- Since bulb exposures produce more noise than usual, the image might look a little grainy.
- You can reduce the noise due to long exposures by setting [3: Long exp. noise reduction] to [1: Auto] or [2: On] in the [¥: Custom Functions (C.Fn)] (p.219).



For bulb exposures, using a tripod and Remote Switch (sold separately, p.229) is recommended.

A-DEP: Automatic Depth-of-Field AE

Objects in the foreground and background will be in focus automatically. All the AF points will function to detect the subject, and the aperture required to attain the necessary depth of field will be set automatically.
* < A-DEP > stands for Auto-Depth of field. This mode sets the depth of field automatically.



■ Set the Mode Dial to < A-DEP>.



Focus the subject.

- Aim the AF points over the subjects and press the shutter button halfway (^{*}Ø4).
- All the subjects covered by the AF points flashing in red will be in focus.
- If focus is not achieved, the picture cannot be taken

Take the picture.

? FAQ

- The aperture display in the viewfinder blinks.

 The exposure is correct, but the desired depth of field cannot be
 - The exposure is correct, but the desired depth of field cannot be obtained. Either use a wide-angle lens or move farther away from the subjects.
- The shutter speed display in the viewfinder blinks.
 If the "30" shutter speed blinks, it means that the subject is too dark.
 Increase the ISO speed. If the "4000" shutter speed blinks, it means that the subject is too bright. Decrease the ISO speed.
- A slow shutter speed has been set. Use a tripod to steady the camera.
- I want to use flash.
 Flash can be used, however, the result will be the same as using the
 P > mode with flash. The desired depth of field will not be obtained.

Changing the Metering Mode *

Three methods (metering modes) to measure the subject's brightness are provided. Normally, evaluative metering is recommended. In Basic Zone modes, evaluative metering is set automatically.



Evaluative metering

ោ



Select [Metering mode].

Under the [D:] tab, select [Metering] mode], then press < (set) >.



Set the metering mode.

Select the desired metering mode. then press < (FT) >.



Metering mode

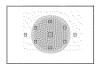
Evaluative metering

This is an all-around metering mode suited for portraits and even backlit subjects. The camera sets the exposure automatically to suit the scene



Partial metering

Effective when the background is much brighter than the subject due to backlighting, etc. The grav area in the left figure is where the brightness is metered to obtain the standard exposure.



Center-weighted average metering

The brightness is metered at the center and then averaged for the entire scene. This metering mode is for advanced users.



With 🕲, the exposure setting will be locked when you press the shutter button halfway and focus is achieved. With [3] and [3], the exposure setting is set at the moment of exposure. (The exposure setting is not locked when you press the shutter button halfway.)

Setting Exposure Compensation *

Av Setting Exposure Compensation

Set exposure compensation if the exposure (without flash) does not come out as desired. This feature can be used in Creative Zone modes (except < M >). You can set the exposure compensation up to ±5 stops in 1/3-stop increments.



Increased exposure for a brighter image



Decreased exposure for a darker image





Dark exposure

Making it brighter:

Hold down the < Av™> button and turn the < 2 > dial to the right. (Increased exposure)

Making it darker:

Hold down the < Av ≥ button and turn the < >> dial to the left (Decreased exposure)

- As shown in the figure, the exposure level is displayed on the LCD monitor and in the viewfinder.
- After taking the picture, cancel the exposure compensation by setting it back to 0.



Increased exposure for a brighter image

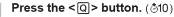


- The exposure compensation amount displayed in the viewfinder goes up to only ±2 stops. If the exposure compensation amount exceeds ±2 stops, the end of the exposure level indicator will display <4> or <>>.
 - The exposure compensation can also be set with [Expo. comp./ AEB] (p.103). If you will set exposure compensation exceeding ±2 stops, you should use [Expo. comp./AEB] to set it.

22 Flash Exposure Compensation

Set flash exposure compensation if the flash exposure of the subject does not come out as desired. You can set the flash exposure compensation up to ±2 stops in 1/3-stop increments.





The Quick Control screen will appear (p.40).



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m

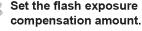
-3..2..1..Q..1..2.t3

SIS AWB

ONE SHOT

Select [22].

- Press the <♦> key to select [22*].
- Flash exposure comp.] will be displayed at the bottom.



- To make the flash exposure brighter, turn the < 2 > dial to the right. (Increased exposure) To make it darker, turn the < ? > dial to the left. (Decreased exposure)
- When you press the shutter button halfway, the < 22 > icon will appear in the viewfinder.
- After taking the picture, cancel the flash exposure compensation by setting it back to 0.



If [Auto Lighting Optimizer] (p.107) is set to any setting other than [Disable], the image may look bright even if a decreased exposure compensation or decreased flash exposure compensation has been set.



You can also set flash exposure compensation with [Built-in flash func. setting] in [Flash control] (p.167).

☐☐☐ Auto Exposure Bracketing ★

This feature takes exposure compensation a step further by varying the exposure automatically (up to ±2 stops in 1/3-stop increments) with three shots as shown below. You can then choose the best exposure. This is called AEB (Auto Exposure Bracketing).



Standard exposure

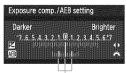


Darker exposure (Decreased exposure)



Brighter exposure (Increased exposure)





AEB amount



Select [Expo. comp./AEB].

Under the [Di] tab, select [Expo. comp./AEB], then press < (ET) >.

Set the AEB amount.

- Turn the < \(\hat{\cap\chi}\) > dial to set the AEB. amount.
- exposure compensation amount. If AEB is combined with exposure compensation, AEB will be applied centering on the exposure compensation amount.
- Press < FT > to set it.
- When you press the <MENU> button to exit the menu, the AEB level will be displayed on the LCD monitor.

Take the picture.

Focus and press the shutter button completely. The three bracketed shots will be taken in this sequence: Standard exposure, decreased exposure, and increased exposure.

Canceling AEB

- Follow steps 1 and 2 to turn off the AEB amount display.
- The AEB setting will also be canceled automatically if the power switch is set to <OFF>, flash recycling is completed, etc.

்ற்∈ Shooting Tips

Using AEB with continuous shooting:

If <>>> continuous shooting (p.86) has been set and you press the shutter button completely, the three bracketed shots will be taken continuously in this sequence: Standard exposure, decreased exposure, and increased exposure.

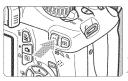
- Using AEB with < > single shooting: Press the shutter button three times to take the three bracketed shots. The three bracketed shots will be exposed in the following sequence: Standard exposure, decreased exposure, and increased exposure.
- Using AEB with the self-timer: If you use the self-timer <⋄> <⋄₂> (p.87), the three bracketed shots will be taken continuously after 10 sec. or 2 sec. With <⋄c> (p.87) set, the number of continuous shots will be three times the number set.



- Neither flash nor bulb exposures can be used with AEB.

X Locking the Exposure [★]

You can lock the exposure when the area of focus is to be different from the exposure metering area or when you want to take multiple shots at the same exposure setting. Press the $< \times >$ button to lock the exposure, then recompose and take the shot. This is called AE (autoexposure) lock. It is effective for backlit subjects.







Focus the subject.

- Press the shutter button halfway.
- The exposure setting will be displayed.

》Press the <X> button. (₫4)

- The < * > icon lights in the viewfinder to indicate that the exposure setting is locked (AE lock).
- Each time you press the < ★ > button, it locks the current autoexposure setting.

Recompose and take the picture.

If you want to maintain the AE lock while taking more shots, hold down the < *> button and press the shutter button to take another shot.

AE Lock Effects

Metering Mode (p.100)	AF Point Selection Method (p.83)		
	Automatic Selection	Manual Selection	
® *	AE lock is applied at the AF point that achieved focus.	AE lock is applied at the selected AF point.	
© C)	AE lock is applied at the center AF point.		

When the lens' focus mode switch is set to **MF**>, AE lock is applied at the center AF point.

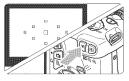
X Locking the Flash Exposure ★

If the subject is on the side of the frame and you use flash, the subject may turn out to be too bright or dark depending on the background, etc. This is when you should use FE lock. After setting the proper flash exposure for the subject, you can recompose (put the subject toward the side) and shoot. This feature can also be used with a Canon EX-series Speedlite.

* FE stands for Flash Exposure.











Press the <4> button.

- The built-in flash will rise.
- Press the shutter button halfway and look in the viewfinder to check that the < 5 > icon is lit.

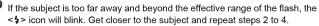
Focus the subject.

Press the < X > button. (₲16)

- Aim the viewfinder center over the subject where you want to lock the flash exposure, then press the <★ > button.
- The flash will fire a preflash and the required flash output is calculated and retained in memory.
- In the viewfinder, "FEL" is displayed for a moment and < \$*> will light.
- Each time you press the < ★ > button, a preflash is fired and the required flash output is calculated and retained in memory.

Take the picture.

- Compose the shot and press the shutter button completely.
- The flash is fired when the picture is taken.



Correcting the Brightness and Contrast Automatically

If the image comes out dark or the contrast is low, the brightness and contrast can be corrected automatically. This feature is called Auto Lighting Optimizer. The default setting is [Standard]. With JPEG images, the correction is done when the image is captured. For RAW images, it can be corrected with Digital Photo Professional (provided software, p.270).





Select [Auto Lighting Optimizer].

Under the [tab, select [Auto] Lighting Optimizer], then press < (SET) >.

Select the setting.

- Select the desired setting, then press < (SET) >.
- Take the picture.
 - The image will be recorded with the brightness and contrast corrected if necessary.



Without correction



With correction



- Under [**∳: Custom Functions (C.Fn)**], if [**5: Highlight tone priority**] is set to [1: Enable], the Auto Lighting Optimizer will be set automatically to [Disable] and you cannot change this setting.
 - Depending on the shooting conditions, noise might increase.
 - If a setting other than [Disable] is set and you use exposure compensation, flash exposure compensation, or manual exposure to darken the exposure, the image might still come out bright. If you want a darker exposure, set [Auto Lighting Optimizer] to [Disable] first.



In Basic Zone modes, [Standard] is set automatically.

Due to the lens characteristics, the four corners of the picture might look darker. This phenomenon is called lens light fall-off or drop in peripheral illumination and can be corrected automatically. The default setting is [Enable]. With JPEG images, the correction is done when the image is captured. For RAW images, it can be corrected with Digital Photo Professional (provided software, p.270).





Select [Peripheral illumin. correct.].

Under the [at] tab, select [Peripheral illumin. correct.], then press < (ET).</p>

Select the setting.

- On the screen, check that [Correction data available] is displayed for the attached lens.
- If [Correction data not available] is displayed, see "About the Lens Correction Data" on the next page.
- Select [Enable], then press < (17) >.

Take the picture.

The image will be recorded with the corrected peripheral illumination.







Correction enabled

About the Lens Correction Data

The camera already contains lens peripheral illumination correction data for about 25 lenses. In step 2, if you select [Enable], the peripheral light correction will be applied automatically for any lens whose correction data has been registered in the camera.

With EOS Utility (provided software, p.270), you can check which lenses have their correction data registered in the camera. You can also register the correction data for unregistered lenses. For details, see the Software Instruction Manual (CD-ROM) for EOS Utility (p.272).



- For JPEG images already captured, lens peripheral illumination correction cannot be applied.
 - Depending on shooting conditions, noise might appear on the image periphery.
 - When using a non-Canon lens, setting the correction to [Disable] is recommended, even if [Correction data available] is displayed.



- Lens peripheral light correction is also applied when an Extender is attached.
- If the correction data for the attached lens has not been registered to the camera, the result will be the same as when the correction is set to [Disable].
- The correction amount applied will be slightly lower than the maximum correction amount settable with Digital Photo Professional (provided software).
- If the lens does not have distance information, the correction amount will be lower.
- The higher the ISO speed, the lower the correction amount will be.

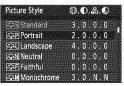
🏂 Customizing Image Characteristics ★

You can customize a Picture Style by adjusting individual parameters like [Sharpness] and [Contrast]. To see the resulting effects, take test shots. To customize [Monochrome], see page 112.





- Under the [☐¹] tab, select [Picture Style], then press <(₤)>.
- The Picture Style selection screen will appear.



Select a Picture Style.

- Select a Picture Style, then press the <DISP.> button.
- The Detail set, screen will appear.



Select a parameter.

Select a parameter such as [Sharpness], then press < (ET)>.



4

Set the parameter.

- Press the <◄►> key to adjust the parameter as desired, then press <€f)>.
- Press the <MENU> button to save the adjusted parameters. The Picture Style selection screen will reappear.
- Any parameter settings different from the default will be displayed in blue.

Parameter Settings and Effects

Sharpness

Adjusts the sharpness of the image.

To make it less sharp, set it toward the **o** end. The closer it is to **o**, the softer the image will look.

To make it sharper, set it toward the **2** end. The closer it is to **2**, the sharper the image will look.

Contrast

Adjusts the image contrast and the vividness of colors.

To decrease the contrast, set it toward the minus end. The closer it is to , the blander the image will look.

To increase the contrast, set it toward the plus end. The closer it is to , the crisper the image will look.

Saturation

The image's color saturation can be adjusted.

To decrease the color saturation, set it toward the minus end. The closer it is to . the more diluted the colors will look.

To increase the color saturation, set it toward the plus end. The closer it is to . the bolder the colors will look.

Color tone

The skin tones can be adjusted.

To make the skin tone redder, set it toward the minus end. The closer it is to , the redder the skin tone will look.

To make the skin tone less red, set it toward the plus end. The closer it is to , the more yellow the skin tone will look.



- By selecting [**Default set.**] in step 3, you can revert the respective Picture Style to its default parameter settings.
 - To shoot with the Picture Style you modified, follow step 2 on page 79 to select the modified Picture Style and then shoot.

Monochrome Adjustment

For Monochrome, you can also set [Filter effect] and [Toning effect] in addition to [Sharpness] and [Contrast] explained on the preceding page.

Filter Effect



With a filter effect applied to a monochrome image, you can make white clouds or green trees stand out more

Filter	Sample Effects	
N: None	Normal black-and-white image with no filter effects.	
Ye: Yellow	The blue sky will look more natural, and the white clouds will look crisper.	
Or: Orange	The blue sky will look slightly darker. The sunset will look more brilliant.	
R: Red	The blue sky will look quite dark. Fall leaves will look crisper and brighter.	
G: Green	Skin tones and lips will look fine. Tree leaves will look crisper and brighter.	



Increasing the [Contrast] will make the filter effect more pronounced.

⊘ Toning Effect



By applying a toning effect, you can create a monochrome image in that color. It can make the image look more impressive.

You can select the following: [N:None], [S:Sepia], [B:Blue], [P:Purple] or [G:Green].

≈ Registering Preferred Image Characteristics ★

You can select a base Picture Style such as [Portrait] or [Landscape], adjust its parameters as desired and register it under [User Def. 1], [User Def. 2], or [User Def. 3].

You can create Picture Styles whose parameter settings such as sharpness and contrast are different. You can also adjust the parameters of a Picture Style which has been registered to the camera with EOS Utility (provided software, p.270).



- Under the [☐¹] tab, select [Picture Style], then press <(□)>.
- The Picture Style selection screen will appear.

Select [User Def.].

- Select [User Def. *], then press the <DISP.> button.
- The Detail set, screen will appear.

DISP Detail se Detail set. Picture Style Standard Sharpness Contrast Saturation Color tone SET OK SET OK SET OK

0,0,0,0

0,0,0,0

3,0,N,N

MENU 🛎

Standard

Standard

Standard

Picture Style

Neutral

F Faithful

Monochrome

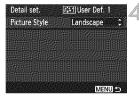
User Def. 1

SE2 User Def. 2

User Def. 3

Press < (SET) >.

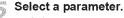
With [Picture Style] selected, press <(ET)>.



Select the base Picture Style.

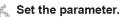
- Press the < ▲▼ > key to select the base Picture Style, then press < (ET) >.
- To adjust the parameters of a Picture Style which has been registered to the camera with EOS Utility (provided software), select the Picture Style here.





Select a parameter such as [Sharpness], then press < (FT)>.





parameter as desired, then press <(SET)>.

For details, see "Customizing Image Characteristics" on pages 110-112.



- Press the <MENU> button to register the modified Picture Style. The Picture Style selection screen will then reappear.
- The base Picture Style will be indicated on the right of [User Def. *].
- The name of the Picture Style having any modified settings (different from the default) registered under [User Def. *] will be displayed in blue.

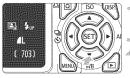


- If a Picture Style has already been registered under [User Def. *]. changing the base Picture Style in step 4 will nullify the parameter settings of the registered Picture Style.
- If you execute [Clear all camera settings] (p.164), all the [User Def. *] settings will revert to the default. Any Picture Style registered via EOS Utility (provided software) will have only its modified parameters reverted to the default setting.

To shoot with a registered Picture Style, follow step 2 on page 79 to select [User Def. *] and then shoot.

WB: Matching the Light Source

The function adjusting the color tone so that white objects look white in the picture is called white balance (WB). Normally, the < WE > (Auto) setting will obtain the correct white balance. If natural-looking colors cannot be obtained with < WE >, you can select the white balance to match the light source or set it manually by shooting a white object.





Press the < ♥ WB > button.

[White balance] will appear.

Select the white balance.

- Press the < ◄►> key or turn the < >> dial to select the desired white balance, then press < (FT)>.
- The "Approx. ****K" (K: Kelvin) displayed for the following white balance settings < ☀, < 🖍>, < **4.**>, < 潦> or < 崇> is the respective color temperature.

Custom White Balance

Custom white balance enables you to manually set the white balance for a specific light source for better accuracy. Do this procedure under the actual light source to be used.



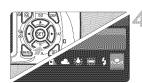


Photograph a white object.

- A plain, white object should fill the viewfinder's center.
- Focus manually and set the standard exposure for the white object.
- You can set any white balance.







Select [Custom White Balance].

- White Balance], then press < (€)>.
- The custom white balance selection screen will appear.

Import the white balance data.

- Select the image that was captured in step 1, then press < (ET)>.
- On the dialog screen which appears, select [OK] and the data will be imported.
- When the menu reappears, press the <MFNU> button to exit the menu.

Select the custom white balance.

- Press the <▼ WB> button.
- Select [№], then press <(□)>.



- If the exposure obtained in step 1 is way off, a correct white balance might not be obtained.
 - If the image was captured while the Picture Style was set to [Monochrome] (p.80), it cannot be selected in step 3.



- Instead of a white object, an 18% gray card (commercially available) can produce a more accurate white balance.
- The personal white balance registered with EOS Utility (provided software, p.270) will be registered under < 2. If you do step 3, the data for the registered personal white balance will be erased.</p>

WB Adjusting the Color Tone for the Light Source ☆

You can correct the white balance that has been set. This adjustment will have the same effect as using a commercially-available color temperature conversion filter or color compensating filter. Each color can be corrected to one of nine levels.

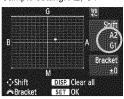
This is for advanced users who are familiar with using color temperature conversion or color compensating filters.

White Balance Correction





Sample setting: A2, G1



Select [WB Shift/BKT].

- Under the [at] tab, select [WB Shift/BKT], then press < (xi) >.
- The WB correction/WB bracketing screen will appear.

Set the white balance correction.

- Press the < ♦> key to move the "■" mark to the desired position.
- B is for blue, A is amber, M is magenta, and G is green. The color in the respective direction will be corrected.
- On the upper right, "Shift" indicates the direction and correction amount.
- Pressing the <DISP.> button will cancel all the [WB Shift/BKT] settings.
- Press < (ET) > to exit the setting and return to the menu.



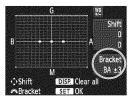
- During the white balance correction, < WB > will be displayed in the viewfinder and on the LCD monitor.
- One level of the blue/amber correction is equivalent to 5 mireds of a color temperature conversion filter. (Mired: Measuring unit indicating the density of a color temperature conversion filter.)

White Balance Auto Bracketing

With just one shot, three images having a different color balance can be recorded simultaneously. Based on the color temperature of the current white balance setting, the image will be bracketed with a blue/amber bias or magenta/green bias. This is called white balance bracketing (WB-BKT). White balance bracketing is possible up to ±3 levels in single-level increments.



B/A bias ±3 levels



Set the white balance bracketing amount.

- In step 2 for white balance correction, when you turn the < △ > dial, the "■" mark on the screen will change to "■■■" (3 points). Turning the dial to the right sets the B/A bracketing, and turning it to the left sets the M/G bracketing.
- On the right, "Bracket" indicates the bracketing direction and correction amount.
- Pressing the <DISP.> button will cancel all the [WB Shift/BKT] settings.
- Press < (ET) > to exit the setting and return to the menu.

Bracketing Sequence

The images will be bracketed in the following sequence: 1. Standard white balance, 2. Blue (B) bias, and 3. Amber (A) bias, or 1. Standard white balance, 2. Magenta (M) bias, and 3. Green (G) bias.



During WB bracketing, the continuous shooting speed will be slower. The maximum burst for continuous shooting will also be lower and the number of possible shots will decrease to one-third the normal number.



- You can also set white balance correction and AEB (p.103) together with white balance bracketing. If you set AEB in combination with white balance bracketing, a total of nine images will be recorded for a single shot.
- Since three images are recorded for one shot, the card will take longer to record the shot.
- "BKT" stands for Bracketing.

■■■■ Setting the Color Reproduction Range *

The range of reproducible colors is called the color space. With this camera, you can set the color space to sRGB or Adobe RGB for captured images. For normal shooting, sRGB is recommended. In Basic Zone modes, sRGB is set automatically.



Select [Color space].

Under the [Di] tab, select [Color space], then press < (ET)>.



Set the desired color space.

Select [sRGB] or [Adobe RGB], then press <(SET)>.



About Adobe RGB

This color space is mainly used for commercial printing and other industrial uses. This setting is not recommended if you do not know about image processing, Adobe RGB, and Design rule for Camera File System 2.0 (Exif 2.21).

The image will look very subdued in a sRGB personal computer environment and with printers not compatible with Design rule for Camera File System 2.0 (Exif 2.21). Post-processing of the image with software will therefore be required.



- If the image is captured with the color space set to Adobe RGB, the file name will start with " MG " (first character is an underscore).
- The ICC profile is not appended. See explanations about the ICC profile in the Software Instruction Manual (p.272) in the CD-ROM.



Shooting with the LCD Monitor (Live View Shooting)

You can shoot while viewing the image on the camera's LCD monitor. This is called "Live View shooting".

Live View shooting is effective for still subjects which do not move.

If you handhold the camera and shoot while viewing the LCD monitor, camera shake can cause blurred images. Using a tripod is recommended.

🗖 About Remote Live View Shooting

With EOS Utility (provided software, p.270) installed in your computer, you can connect the camera to the computer and shoot remotely while viewing the computer screen. For details, see the Software Instruction Manual (p.272) in the CD-ROM.

☐ Shooting with the LCD Monitor



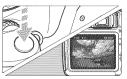
Display the Live View image.

- Press the < n > button.
- The Live View image will appear on the LCD monitor
- The Live View image will closely reflect the brightness level of the actual image you capture.



Focus the subject.

When you press the shutter button halfway, the camera will focus with the current AF mode (p.128-134).



Take the picture.

- Press the shutter button completely.
- The picture will be taken and the captured image is displayed on the LCD monitor.
- After the image review ends, the camera will return to Live View shooting automatically.
- Press the < button to exit Live</p> View shooting.



- The image's field of view is approx. 99% (when the image-recording quality is set to JPEG **▲ L**).
 - The metering mode will be fixed to evaluative metering for Live View shooting.
 - In Creative Zone modes, you can check the depth of field by setting [8: Assign SET button to [5: Depth-of-field preview] in the [4: Custom Functions (C.Fn)].
 - During continuous shooting, the exposure set for the first shot will also be applied to subsequent shots.
 - Using <A-DEP> will be the same as using <P>.

Enabling Live View Shooting



Set [Live View shoot.] to [Enable].

In Basic Zone modes, [Live View shoot.] will be displayed under [D:], and in Creative Zone modes, it will be displayed under [].

Battery Life with Live View Shooting [Approx. number of shots]

Temperature	Shooting Conditions	
	No Flash	50% Flash Use
At 23°C / 73°F	240	220
At 0°C / 32°F	230	210

- The figures above are based on a fully-charged Battery Pack LP-E10 and CIPA (Camera & Imaging Products Association) testing standards.
- With a fully-charged Battery Pack LP-E10, continuous Live View shooting is possible for approx. 2 hr. at 23°C / 73°F and approx. 1 hr. 40 min. at 0°C / 32°F.



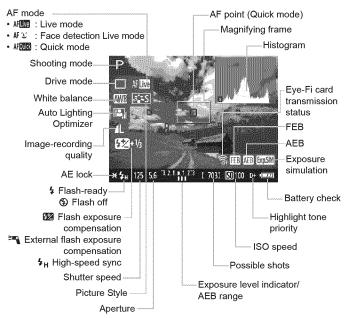
- During Live View shooting, do not point the lens toward the sun. The sun's heat can damage the camera's internal components.
 - Cautions for using Live View shooting are on pages 136-137.



- When flash is used, there will be two shutter sounds, but only one shot will be taken.
- If the camera is not operated for a prolonged period, the power will turn off automatically as set with [Auto power off] (p.155). If [Auto power off] is set to [Off], the Live View function will terminate automatically after 30 min. (camera power remains on).
- With an HDMI cable (sold separately), you can display the Live View image on a TV (p.191).

About the Information Display

Each time you press the <DISP.> button, the information display will change.





- When < I is displayed in white, it indicates that the Live View image brightness is close to what the captured image will look like.</p>

 - If flash is used or bulb is set, the < icon and histogram will be grayed out (for your reference). The histogram might not be properly displayed in low- or bright-light conditions.</p>

Final Image Simulation

The final image simulation reflects the effects of the Picture Style, white balance, etc., in the Live View image so you can see what the captured image will look like.

During still photo shooting, the Live View image will automatically reflect the settings listed below.

Final image simulation during Live View shooting

- Picture Style
 - * All parameters such as sharpness, contrast, color saturation, and color tone will be reflected.
- White balance
- White balance correction
- Shoot by ambience selection
- Shoot by lighting or scene type
- Exposure
- Depth of field preview (With C.Fn-8-5 set and < (st) > ON)
- Auto Lighting Optimizer
- Peripheral illumination correction
- Highlight tone priority

Shooting Function Settings

Function settings particular to Live View shooting are explained here.

Quick Control

While the image is displayed on the LCD monitor in Creative Zone modes, pressing the < \(\overline{Q} \) button will enable you to set the AF mode, drive mode, white balance, Picture Style, Auto Lighting Optimizer, image-recording quality, and ISO speed. In Basic Zone modes, you can set the AF mode and the settings shown in the table on page 63.



Press the <Q> button.

- The functions settable with Quick Control will appear on the left of the screen.
- If the AF mode is < AF 1000 >, the AF point will also be displayed. You can also select the AF point.

Select a function and set it.

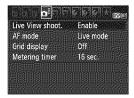
- Press the < ▲▼ > kev to select a function.
- The selected function and Feature guide (p.47) will appear.
- Press the <

 Nev or turn the
 </p> < 2 > dial to change the setting. Pressing < (ET) > will display the respective function's setting screen.



In Creative Zone modes, if [9: Flash button function] is set to [1: ISO speed] in [4: Custom Functions (C.Fn)], you can raise the built-in flash with Quick Control. The ISO speed will be set with the <\$> button.

Menu Function Settings



The menu options below are displayed.

In Basic Zone modes, the Live View menu options will be displayed under [**□**:], and in Creative Zone modes, they will be displayed under [**□**:].

- Live View shooting You can set Live View shooting to [Enable] or [Disable].
- AF mode You can select [Live mode] (p.128), [* Live mode] (p.129), or [Quick mode] (p.133).
- Grid display
 With [Grid 1 ##] or [Grid 2 ###], you can display grid lines. It can help you level the camera vertically or horizontally.
- Metering timer * You can change how long the exposure setting is displayed (AE lock time). This option is not displayed in Basic Zone modes. (Metering timer is fixed at 16 sec.)



- The settings for these menu options will apply only to Live View shooting. They do not take effect during viewfinder shooting.
- If you select [O: Dust Delete Data], [Y: Clean manually], [Y: Clear settings], or [Y: Firmware Ver.], the Live View shooting will terminate.

Changing the Autofocus Mode

Selecting the AF Mode

The AF modes available are [Live mode], [Live mode] (face detection, p.129), and [Quick mode] (p.133).

If you want to achieve precise focus, set the lens focus mode switch to <**MF**>, magnify the image, and focus manually (p.135).



Select the AF mode.

- Under the [tab, select [AF mode].
- Select the desired AF mode, then press < (ET) >.
- While the Live View image is displayed, you can press the <Q> button to select the AF mode on the Quick Control screen (p.126).

Live Mode: AF

The image sensor is used to focus. Although AF is possible with the Live View image displayed, **the AF operation will take longer than with the Quick mode**. Also, achieving focus may be more difficult than with the Quick mode.



AF point

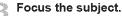
Display the Live View image.

- Press the < > button.
- The Live View image will appear on the LCD monitor.
- The AF point <□> will appear.

Move the AF point.

- Press the < >> key to move the AF point to where you want to focus (it cannot go to the edges of the picture).
- To return the AF point to the center, press <(xi)>. (If C.Fn-8 has been set, press < Av ≥ + <(xi)>.)





- Aim the AF point over the subject and press the shutter button halfway.
- When focus is achieved, the AF point will turn green and the beeper will sound
- If focus is not achieved, the AF point will turn orange.



Take the picture.

 Check the focus and exposure, then press the shutter button completely to take the picture (p.122).

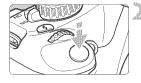
≗ (Face detection) Live Mode: AF≗

With the same AF method as the Live mode, human faces are detected and focused. Have the target person face the camera.



Display the Live View image.

- Press the < > button.
- The Live View image will appear on the LCD monitor.
- When a face is detected, the < ?> frame will appear over the face to be focused.
- If multiple faces are detected, < € >> will be displayed. Press the < ◀►> key to move the < € >> frame over the desired target face.





- Press the shutter button halfway and the camera will focus the face covered by the < >> frame.
- When focus is achieved, the AF point will turn green and the beeper will sound.
- If focus is not achieved, the AF point will turn orange.
- If a face cannot be detected, the AF point <□> will be displayed and AF will be executed at the center.



Check the focus and exposure, then press the shutter button completely to take the picture (p.122).





- If the focus is way off, face detection will not be possible. If the lens enables manual focusing even while the lens focus mode switch is set to <AF>, turn the focusing ring to attain rough focus. The face will then be detected and < >> will be displayed.
- An object other than a human face might be detected as a face.
- Face detection will not work if the face is very small or large in the picture, too bright or too dark, titled horizontally or diagonally, or partially hidden.
- The < > focusing frame might cover only part of the face.



- When you press <€i)>, the AF mode will switch to the Live mode (p.128). You can press the <♦> key to move the AF point. Press <€)> again to return to the 😃 (face detection) Live mode. (If C.Fn-8 has been set, press < Av 2 > + < (€T) >.)
 - Since AF is not possible with a face detected near the edge of the picture, the <! > will be graved out. Then if you press the shutter button halfway, the center AF point < >> will be used to focus.

Live Mode and & (Face Detection) Live Mode Notes

AF operation

- Focusing will take slightly longer.
- Even when focus has been achieved, pressing the shutter button halfway will focus again.
- The image brightness may change during and after the AF operation.
- If the light source changes while the Live View image is displayed, the screen might flicker and focusing may be difficult. If this happens, stop the Live View shooting and autofocus under the actual light source first.
- If you press the <⊕ > button in the Live mode, the image will be magnified at the AF point. If focusing is difficult in the magnified view, return to the normal view and autofocus. Note that the AF speed may differ between the normal and magnified views.
- If you autofocus in the Live mode's normal view and then magnify the image, the focus might be off.
- In the Live mode, pressing the < € > button will not magnify the image.



- In the Live mode or 🕹 (face detection) Live mode, if you shoot a peripheral subject and it is slightly out of focus, aim the center AF point over the subject to focus, then take the picture.
 - The AF-assist beam will not be emitted. However, if an EX-series Speedlite (sold separately) equipped with a LED light is used, the LED light will turn on for AF-assist when necessary in the Live mode and 🕹 (face detection) Live mode.

Shooting conditions which can make focusing difficult:

- Low-contrast subjects such as the blue sky and solid-color, flat surfaces.
- Subjects in low light.
- Stripes and other patterns where there is contrast only in the horizontal direction.
- Under a light source whose brightness, color, or pattern keeps changing.
- Night scenes or points of light.
- Under fluorescent lighting or when the image flickers.
- Extremely small subjects.
- Subjects at the edge of the picture.
- Subjects strongly reflecting light.
- The AF point covers both a near and faraway subject (such as an animal in a cage).
- Subjects which keep moving within the AF point and cannot keep still due to camera shake or subject blur.
- A subject approaching or moving away from the camera.
- Autofocusing while the subject is way out of focus.
- Soft focus effect is applied with a soft focus lens.
- A special effects filter is used.

Quick Mode: AFORM

The dedicated AF sensor is used to focus in One-Shot AF mode (p.81), using the same AF method as with viewfinder shooting.

Although you can focus the target area quickly, the Live View image will be interrupted momentarily during the AF operation.

AF point



Magnifying frame





Display the Live View image.

- Press the < >> button.
- The Live View image will appear on the LCD monitor.
- The small boxes on the screen are the AF points, and the larger box is the magnifying frame.

🍞 Select the AF point. 🌣

- Press the <Q> button (₺10) to display the Quick Control screen.
- The settable functions will be displayed on the left of the screen.
- Press the < AV > key to make the AF point selectable.
- Turn the < i> dial to select the AF point.







Focus the subject.

- Aim the AF points over the subject and press the shutter button halfway.
- The Live View image will turn off, the reflex mirror will go back down, and AF will be executed
- When focus is achieved, the AF point which achieved focus will turn green and the Live View image will reappear.
- If focus is not achieved, the AF point will turn orange and blink.

Take the picture.

Check the focus and exposure, then press the shutter button completely to take the picture (p.122).



You cannot take a picture during autofocusing. Take the picture while the Live View image is displayed.

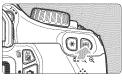
MF: Focusing Manually

You can magnify the image and focus precisely manually.





Magnifying frame





AE lock
Magnified area position
Magnification

Set the lens focus mode switch to <MF>.

Turn the lens focusing ring to focus roughly.

Move the magnifying frame.

- Press the < +> key to move the magnifying frame to the position where you want to focus.
- To return the magnifying frame to the center, press <@f)>. (If C.Fn-8 has been set, press <Av™> + <@f)>.)

Magnify the image.

- Press the < ⊕ > button.
- The area within the magnifying frame will be magnified.
- Each time you press the <⊕ > button, the view will change as follows:

$$\rightarrow$$
 5x \rightarrow 10x \rightarrow Normal view

Focus manually.

- While looking at the magnified image, turn the lens focusing ring to focus.
- After achieving focus, press the <[⊕]

 button to return to the normal view.

Take the picture.

Check the focus and exposure, then press the shutter button to take the picture (p.122).



Live View Shooting Cautions

White < ☐> and Red < ☐> Internal Temperature Warning Icons

- If the camera's internal temperature increases due to prolonged Live View shooting or a high ambient temperature, a white < 101 > icon will appear. If you continue shooting while this icon is displayed, the image quality of still photos may deteriorate. You should stop the Live View shooting and allow the camera to cool down before shooting again.
- If the camera's internal temperature further increases while the white icon is displayed, a red <
 icon will start blinking. This blinking icon is a warning that the Live View shooting will soon be terminated automatically. If this happens, you will not be able to shoot again until the camera's internal temperature decreases. Turn off the power and let the camera rest for a while.
- Shooting with the Live View function at a high temperature for a prolonged period will cause the < 18 > and < 18 > icons to appear earlier. When not shooting, turn off the camera.

Live View Image Cautions

- Under low- or bright-light conditions, the Live View image might not reflect the brightness of the captured image.
- If the light source within the image changes, the screen might flicker. If this happens, stop the Live View shooting and resume shooting under the actual light source to be used.
- If you point the camera in a different direction, it might throw off the Live View image's correct brightness momentarily. Wait until the brightness level stabilizes before shooting.
- If there is a very bright light source in the picture, such as the sun, the bright area might appear black on the LCD monitor. However, the actual captured image will correctly show the bright area.
- In low light, if you set the [Y: LCD brightness] to a bright setting. chrominance noise may appear in the Live View image. However, the chrominance noise will not be recorded in the captured image.
- When you magnify the image, the image sharpness may look more pronounced than it really is.



Live View Shooting Cautions

Shooting Result Cautions

- When you shoot continuously with the Live View function for a long period, the camera's internal temperature may increase and it can degrade image quality. Terminate Live View shooting when not shooting images.
- Before taking a long exposure, stop Live View shooting temporarily and wait several minutes before shooting. This is to prevent image degradation.
- Live View shooting in high temperatures and at high ISO speeds may cause noise or irregular colors.
- When you shoot at high ISO speeds, noise (banding, dots of light, etc.) may become noticeable.
- If you take the picture during magnified view, the exposure might not come out as desired. Return to the normal view before taking the picture. During the magnified view, the shutter speed and aperture will be displayed in orange. Even if you take the picture during magnified view, the image will be captured in the normal view.
- If [Ox: Auto Lighting Optimizer] (p.107) is not set to [Disable], the image may look bright even if a decreased exposure compensation or decreased flash exposure compensation has been set.
- If you use a TS-E lens to shift the lens vertically or use an Extension Tube, the standard exposure might not be obtained or an irregular exposure may result.

Custom Function Cautions

During Live View shooting, certain Custom Function settings will not take effect (p.217).

Lens and Flash Cautions

- The focus preset feature on super telephoto lenses cannot be used.
- FE lock is not possible when the built-in flash or an external Speedlite is used. Modeling flash will not work with an external Speedlite.



Shooting Movies



When you set the Mode Dial to <₱¬, you can shoot High-Definition (HD) movies. The movie recording format will be MOV

Cards which can record movies

When shooting movies, use a large-capacity SD card rated SD Speed Class 6 "CLASS®," or higher.

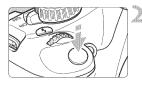
If you use a slow-writing card when shooting movies, the movie might not be recorded properly. And if you playback a movie on a card having a slow reading speed, the movie might not playback properly.

To check the card's read/write speed, refer to the card manufacturer's Web site.

Movies !!

When you set the shooting mode to <'\,\,\), you can easily shoot High-Definition (HD) movies with autoexposure. When playing movies, connecting the camera to a TV set is recommended (p.184, 191).







Recording movie



Microphone

Set the Mode Dial to <'∰>.

The reflex mirror will make a sound, then the image will appear on the LCD monitor.

Focus the subject.

- Before shooting a movie, autofocus or manual focus (p.128-135).
- When you press the shutter button halfway, the camera will focus with the current AF mode.

Shoot the movie.

- Press the < >> button to start shooting a movie. To stop movie shooting, press < >> again.
- While the movie is being shot, the " mark will be displayed on the upper right of the screen.



- In the movie shooting mode, you cannot take a still photo even if you press the shutter button completely.
 - During movie shooting, do not point the lens toward the sun. The sun's heat can damage the camera's internal components.
 - Cautions for movie shooting are on pages 150 and 151.
 - If necessary, also read the Live View shooting cautions on pages 136 and 137.



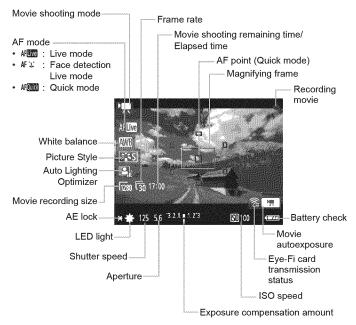
- A movie file is recorded each time you shoot a movie.
 - The image's field of view is approx. 99%.
 - The ISO speed, shutter speed, and aperture are set automatically.
 - AE lock is possible by pressing the <\(\cdot\) button (p.105). To cancel AE</p> lock during movie shooting, press the <⊞> button.
 - set the exposure compensation.
 - When you press the shutter button halfway, the exposure setting displayed at the screen bottom is for your reference.
 - The sound will be recorded by the camera's built-in monaural microphone (p.140).
 - The sound recording level will be adjusted automatically.
 - With a fully-charged Battery Pack LP-E10, the total shooting time will be as follows: At 23°C/73°F: Approx. 1 hr. 50 min., At 0°C/32°F: Approx. 1 hr. 30 min.

Using an EX-series Speedlite (Sold Separately) Equipped with a LED Light

This camera is compatible with the function turning on the LED light automatically in low-light conditions. For details, see the EX Speedlite's instruction manual.

About the Information Display

Each time you press the <DISP.> button, the information display will change.





- If there is no card in the camera, the movie shooting remaining time will be displayed in red.
- When movie shooting starts, the movie shooting remaining time will change to the elapsed time.

Final Image Simulation

The final image simulation reflects the effects of the Picture Style, white balance, etc., in the movie image so you can see what the captured movie will look like.

During movie shooting, the movie image will automatically reflect the settings listed below.

Final image simulation for movie shooting

- Picture Style
 - * All parameters such as sharpness, contrast, color saturation, and color tone will be reflected.
- White balance
- Exposure
- Depth of field
- Auto Lighting Optimizer
- Peripheral illumination correction
- Highlight tone priority

Shooting Function Settings

Function settings particular to movie shooting are explained here.

Quick Control

While the movie image is displayed on the LCD monitor, you can press the <Q> button to enable the following to be set: AF mode, white balance, Picture Style, and Auto Lighting Optimizer.



Press the <Q> button. (₫10)

- The functions settable with Quick Control will appear on the left of the screen.
- If the AF mode is < AFORMS >, the AF point will also be displayed.

Select a function and set it.

- Press the < ▲▼ > key to select a function.
- ▶ The selected function and Feature guide (p.47) will appear.
- Press the < ◀►> key or turn the < ☼> dial to change the setting. Pressing < ⓒ> will display the respective function's setting screen.

Menu Function Settings

The menu options displayed under the ['興'], ['興:], and ['興:] tabs are explained below.

['艸゚] tab



AF mode

The AF modes will be the same as described on pages 128-134. You can select [Live mode], [Live mode], or [Quick mode]. Note that continuous focusing of a moving subject is not possible.

AF with shutter button during '\(\mathbb{M}\) (movie recording) When [Enable] is set, AF is possible during movie shooting. However, continuous autofocusing is not possible. If you autofocus during movie shooting, you might momentarily throw the focus way off or change the exposure. The movie will also record the lens operation noise.

During movie shooting, if the [Quick mode] AF mode is set, AF will be executed in [Live mode].



- The settings under the ['興"/'興:] menu tabs will take effect only in the <'m>> mode. They will not be applied in shooting modes other than the <'艸> mode.
- The [AF mode] setting will also be applied to Live View shooting.

Shutter/AE lock button

You can change the function assigned to the shutter button's halfway position and to the AE lock button.

AF/AE lock:

Normal function. Press the shutter button halfway to execute AF. Press the <★> button for AE lock.

AE lock/AF:

Press the shutter button halfway for AE lock. For AF, press the < *> button. Convenient when you want to focus and meter at different parts of the picture.

· AF/AF lock, no AE lock:

Press the shutter button halfway to execute AF. While you autofocus by pressing the shutter button halfway, you can pause the autofocus by holding down the < *\(\dagger > \) button. You can resume the autofocus by letting go of the < *\(\dagger > \) button. AE lock is not possible.

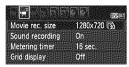
· AE/AF, no AE lock:

Press the shutter button halfway for metering. For AF, press the <★> button. AE lock is not possible.

'Me Highlight tone priority

If [Enable] is set, highlight detail will be improved. The dynamic range is expanded from the standard 18% gray to bright highlights. The gradation between the grays and highlights becomes smoother. The settable ISO speed range will be ISO 200-6400. The Auto Lighting Optimizer will also be set automatically to [Disable] and cannot be changed.

['艸:] tab



Movie recording size

The movie will be recorded in [1280x720] High-Definition (HD) quality. You can select the frame rate [词] or [词] (recorded frames per second) to suit your TV set's video format.

- * The frame rate is expressed as fps or frames per second.
 - [1] : For areas where the TV video format is NTSC (North America, Japan, Korea, Mexico, etc.).
 - [[]] : For areas where the TV video format is PAL (Europe, Russia, China, Australia, etc.).

Total Movie Recording Time and File Size per Minute

- Due to the file system, movie shooting will stop automatically if the file size of a single movie clip reaches 4GB.
- You can immediately resume shooting another movie by pressing the < >> button. (A new movie file starts being recorded.)

Movie-recording Size	Total Recording Time (approx.)			File Size
	4GB Card	8GB Card	16GB Card	(approx.)
[1280x720] 📆 📆	17 min.	34 min.	1 hr. 8 min.	222.6 MB/min.



- An increase of the camera's internal temperature may cause movie shooting to stop before the maximum recording time shown in the table above (p.150).
- The maximum recording time of one movie clip is 29 min. 59 sec.



- Movie shooting in Full High-Definition (Full HD) or Standard Definition (SD) quality is not possible.
- With ZoomBrowser EX/ImageBrowser (provided software, p.270), you can extract still photos from a movie. The quality of the extracted still photo will be [1280x720] for about 920,000 pixels.

Sound recording

When the sound recording is set to [On], sound will be recorded by the built-in monaural microphone. The sound recording level will be adjusted automatically. An external microphone cannot be used.

Metering timer

You can change how long the exposure setting is displayed (AE lock time).

Grid display

With [Grid 1#] or [Grid 2##], you can display grid lines. It can help you level the camera vertically or horizontally.



- The sound will be recorded at a 48 kHz sampling frequency and 16-bit for both L and R.
- The Metering timer and Grid display settings will also be reflected in Live View shooting.

['興:] tab



Exposure compensation

You can set exposure compensation for movies up to ±3 stops in 1/3-stop increments.

Auto Lighting Optimizer

The Auto Lighting Optimizer can be set as explained on page 107. If the ['\;\frac{1}{m}'] menu tab's ['\;\frac{1}{m}' Highlight tone priority] is set to [Enable], the Auto Lighting Optimizer will be set automatically to [Disable] and cannot be changed.

Custom White Balance

Picture Style

The Picture Style can be set as explained on pages 79.



About the Red < 10 > Internal Temperature Warning Icon

- If the camera's internal temperature is high, a blinking red icon < 100 may</p> appear. This blinking icon is a warning that the movie shooting will soon be terminated automatically. If this happens, you will not be able to shoot again until the camera's internal temperature decreases. Turn off the power and let the camera rest for a while.
- Movie shooting at a high temperature for a prolonged period will cause the < text > icon to appear sooner. When not shooting, turn off the camera.



Movie Shooting Cautions

Recording and Image Quality

- If the attached lens has an Image Stabilizer, the Image Stabilizer will operate at all times even if you do not press the shutter button halfway. The Image Stabilizer will thereby consume battery power and may shorten the total movie shooting time or decrease the number of possible shots. If you use a tripod or if the Image Stabilizer is not necessary, you should set the IS switch to <OFF>
- The camera's built-in microphone will also record camera operation noise
- If movie shooting is not possible due to insufficient remaining capacity of the card, the movie recording size and movie shooting remaining time (p.142) will be displayed in red.
- If you use a card having a slow writing speed, a five-level indicator might appear on the right of the screen during movie shooting. It indicates how much data has not yet been written to the card (remaining capacity of the internal buffer memory). The slower the card, the faster the indicator will climb upward. If the indicator becomes full, movie shooting will stop automatically.





Indicator

If the card has a fast writing speed, the indicator will either not appear or the level (if displayed) will hardly go upward.

First, shoot a few test movies to see if the card can write fast enough.



Movie Shooting Cautions

Playback and TV connection

- If the brightness changes during movie shooting, that part might look momentarily still when you playback the movie.
- If you connect the camera to a TV set with an HDMI cable (p.191) and shoot a movie, the movie being shot will be displayed at a small size on the TV. But the movie will still be properly recorded in High-Definition (HD) quality.
- If you connect the camera to a TV set and shoot a movie, the TV will not output any sound during the shooting. However, the sound will be properly recorded.



Handy Features

- Silencing the Beeper (p.154)
- Card Reminder (p.154)
- Setting the Image Review Time (p.154)
- Setting the Auto Power-off Time (p.155)
- Adjusting the LCD Monitor Brightness (p.155)
- Creating and Selecting a Folder (p.156)
- File Numbering Methods (p.158)
- Setting Copyright Information (p.160)
- Auto Rotation of Vertical Images (p.162)
- Checking Camera Settings (p.163)
- Reverting the Camera to the Default Settings (p.164)
- Turning the LCD Monitor Off/On (p.166)
- Changing the Shooting Settings Screen Color (p.166)
- Setting the Flash (p.167)
- Appending Dust Delete Data (p.171)
- Manual Sensor Cleaning (p.173)

Handy Features

MENU Silencing the Beeper

You can prevent the beeper from sounding when focus is achieved or during self-timer operation.



Under the [\square] tab, select [Beep], then press < \in \square >. Select [Disable], then press < \in \square >.

MENU Card Reminder

This prevents shooting if there is no card in the camera.



Release shutter without card Enable Disable Under the [☐ tab, select [Release shutter without card], then press <(€)>. Select [Disable], then press <(€)>.

If there is no card installed and you press the shutter button, "Card" will be displayed in the viewfinder, and you cannot release the shutter.

MENU Setting the Image Review Time

You can set how long the image is displayed on the LCD monitor immediately after capture. If **[Off]** is set, the image will not be displayed immediately after image capture. If **[Hold]** is set, the image review will be displayed up until the **[Auto power off]** time.

During image review, if you operate any camera controls such as pressing the shutter button halfway, the image review will end.



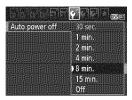
Under the [**a**] tab, select [Image review], then press <**(**) >. Select the desired setting, then press <**(**) >.

MENU Setting the Auto Power-off Time

To save battery power, the camera turns off automatically after the set time of idle operation elapses. You can set this auto power-off time. When the camera has turned off due to auto power off, you can wake it up by pressing the shutter button halfway or pressing any of the following buttons: <MENU>, < >> >, etc.

If [Off] has been set, either turn off the camera yourself or press the <DISP.> button to turn off the LCD monitor to save battery power.

Even if [Off] has been set and the camera is not used for 30 min., the LCD monitor will turn off automatically. To turn on the LCD monitor again, press the <DISP.> button.



Under the [♥¹] tab, select [Auto power off], then press <€r)>. Select the desired setting, then press <€r)>.

MENU Adjusting the LCD Monitor Brightness

You can adjust the brightness of the LCD monitor to make it easier to read.





Under the [♥¹] tab, select [LCD brightness], then press <⊕1>. With the adjustment screen displayed, press the <◄►> key to adjust the brightness, then press <⊕1>.

When checking the exposure of an image, set the LCD monitor brightness to 4 and prevent the ambient light from affecting the reviewed image.

MENU Creating and Selecting a Folder

You can freely create and select the folder where the captured images are to be saved.

This is optional since a folder will be created automatically for saving captured images.

Create a Folder





Under the [f'] tab, select [Select folder], then press <€□>.



Select [Create folder].

Select [Create folder], then press <(ετ)>.



Create a new folder.

- Select [OK], then press <(€)>.
- A new folder with a higher one-up folder number is created.

Selecting a Folder

Lowest file number
Number of images
in folder
Select folder



Folder name

Highest file number

- With the folder selection screen displayed, select a folder and press <(f)>.
- The folder where the captured images will be saved is selected.
- Subsequent captured images will be recorded into the selected folder.

About Folders

As with "100CANON" for example, the folder name starts with three digits (folder number) followed by five alphanumeric characters. A folder can contain up to 9999 images (file No. 0001 - 9999). When a folder becomes full, a new folder with a higher one-up folder number is created automatically. Also, if manual reset (p.159) is executed, a new folder will be created automatically. Folders numbered from 100 to 999 can be created.

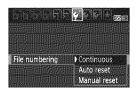
Creating Folders with a Personal Computer

With the card open on the screen, create a new folder named "DCIM". Open the DCIM folder and create as many folders as necessary to save and organize your images. The folder name must follow the "100ABC_D" format where the first three digits is 100 - 999 followed by five alphanumeric characters. The five characters can be a combination of upper- or lower-case letters from A to Z, numerals, and an underscore "_". There can be no space in the folder name. Also, folder names cannot have the same three-digit number such as "100ABC_D" and "100W_XYZ" even if the letters are different.

MENU File Numbering Methods

The image files will be numbered from 0001 to 9999 in the order the images are taken, then saved in a folder. You can change how the file number is assigned.

The file number will appear on your computer in this format: **IMG 0001.JPG**.

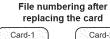


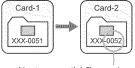
Under the [♥¹] tab, select [File numbering], then press < (€) >. The available settings are described below. Select one, then press < (€) >.

[Continuous]: The file numbering continues in sequence even after you replace the card or create a folder.

Even after you replace the card or create a new folder, the file numbering continues in sequence up to 9999. This is convenient when you want to save images numbered anywhere between 0001 to 9999 in multiple cards or folders into one folder in your personal computer.

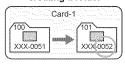
If the replacement card or existing folder already contains images recorded previously, the file numbering of the new images might continue from the file numbering of the existing images in the card or folder. If you want to use continuous file numbering, you should use a newly-formatted card each time.





Next sequential file number

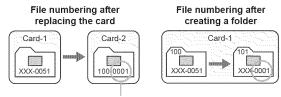
File numbering after creating a folder



[Auto reset]: The file numbering is reset to 0001 whenever you replace the card or create a folder.

Whenever the card is replaced or a new folder created, the file numbering starts from 0001. This is convenient if you want to organize images according to cards or folders.

If the replacement card or existing folder already contains images recorded previously, the file numbering of the new images might continue from the file numbering of the existing images in the card or folder. If you want to save images with the file numbering starting from 0001, use a newly formatted card each time.



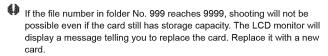
File numbering is reset

[Manual reset]: To reset the file numbering to 0001 manually or to start from file number 0001 in a new folder.

When you reset the file numbering manually, a new folder is created automatically and the file numbering of images saved to that folder starts from 0001.

This is convenient if you want to use different folders for the images taken yesterday and the ones taken today, for example.

After the manual reset, the file numbering returns to continuous or auto reset. (There will be no Manual reset confirmation screen.)



For both JPEG and RAW images, the file name will start with "IMG_". Movie file names will start with "MVI_". The extension will be ".JPG" for JPEG images, ".CR2" for RAW images, and ". MOV" for movies.

MENU Setting Copyright Information *

When you set the copyright information, it will be appended to the image as Exif information.





Under the [♥:] tab, select [Copyright information], then press < (€)>.



Select the option to be set.

- Select [Enter author's name] or [Enter copyright details], then press <(er)>.
- The text entry screen will appear.
- Select [Display copyright info.] to check the copyright information currently set.
- Select [Delete copyright information] to delete the copyright information currently set.



Enter text.

- Refer to "Text Entry Procedure" on the next page and enter the copyright information.
- Enter up to 63 alphanumeric characters and symbols.

Exit the setting.

After entering the text, press the <MENU> button to exit.

Text Entry Procedure



- Changing the entry area: Press the < | > button to toggle between the top and bottom entry areas.
- Moving the cursor: Press the < ◀►> key to move the cursor

Entering text:

In the bottom area, press the <♦> key or turn the <<>> dial to select a character, then press < (> to enter it.

Deleting a character:

Press the < m > button to delete one character.

Exiting:

After entering the text, press the <MENU> button to finalize the text entry and return to the screen in step 2.

Canceling the text entry:

To cancel the text entry, press the <DISP.> button to cancel it and return to the screen in step 2.



You can also set or check the copyright information with EOS Utility (provided software, p.270).

MENU Auto Rotation of Vertical Images



Vertical images are rotated automatically so they are displayed vertically on the camera's LCD monitor and on the personal computer instead of horizontally. The setting of this feature can be changed.



Under the [♥¹] tab, select [Auto rotate], then press <ⓒr>>. The available settings are described below. Select one, then press <ⓒr>>.

- [On] : The vertical image is automatically rotated only on the computer.
- [Off] : The vertical image is not automatically rotated.

? FAQ

- The vertical image is not rotated during the image review immediately after it is captured.
 - Press the < >> button and the image playback will display the rotated image.
- [On ☐ ■] is set, but the image does not rotate during playback. Auto rotate will not work with vertical images captured while [Auto rotate] was set to [Off]. If the vertical image is taken while the camera is pointed up or down, the image might not be rotated automatically for playback. In such a case, see "Rotating the Image" on page 179.
- On the camera's LCD monitor, I want to rotate an image captured when [On ■] had been set. Set [On ♠ ■], then playback the image. It will be rotated.
- The vertical image does not rotate on the computer screen. The software used is not compatible with image rotation. Use the software provided with the camera instead.

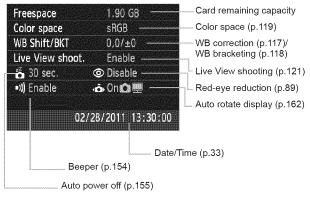
DISP. Checking Camera Settings

While the menu is displayed, press the <DISP.> button to display the camera's major function settings.



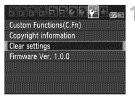
- While the menu is displayed, press the <DISP.> button to display the settings.
- Press the <DISP.> button again to return to the menu.

Settings display



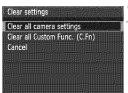
MENU Reverting the Camera to the Default Settings *

The camera's shooting settings and menu settings can be reverted to the default. This can be done in Creative Zone modes.



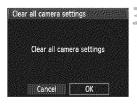
Select [Clear settings].

Under the [¥:] tab, select [Clear settings], then press < (ET)>.



Select [Clear all camera settings].

Select [Clear all camera settings], then press <(ET)>.



Select [OK].

- Select [OK], then press < (st)>.
- Setting [Clear all camera settings] will reset the camera to the default settings on the next page.

? FAQ

Clearing all camera settings:

After the procedure above, go to [**Y**: Clear settings] and select [Clear all Custom Func. (C.Fn)] to clear all the Custom Function settings (p.216).

Shooting Settings

chicaming commige	
AF mode	One-Shot AF
AF point selection	Automatic selection
Drive mode	(Single shooting)
Metering mode	(Evaluative metering)
ISO speed	AUTO (Auto)
ISO Auto	Max.: 3200
Exposure compensation/AEB	Canceled
Flash exposure compensation	0 (Zero)
Custom Functions	Unchanged

Camera Settings	
Auto power off	30 sec.
Веер	Enable
Release shutter without card	Enable
Image review	2 sec.
Histogram	Brightness
Image jump wl 🕮	ൻ (10 images)
Auto rotate	On 🗖 🖳
LCD brightness	* *
LCD off/on button	Shutter button
Date/Time	Unchanged
Language	Unchanged
Feature guide	Enable
Copyright information	Unchanged
Control over HDMI	Disable
Eye-Fi transmission	Disable
My Menu settings	Unchanged

Live View Shooting Settings

arra trait and anning actiming		
Live View shooting	Enable	
AF mode	Live mode	
Grid display	Off	
Metering timer	16 sec.	

Image-recording Settings

illiage record	9
Quality	4 L
Picture Style	Standard
Auto Lighting Optimizer	Standard
Peripheral illumination correction	Enable/ Correction data retained
Color space	sRGB
White balance	AWE (Auto)
Custom white balance	Canceled
WB correction	Canceled
WB-BKT	Canceled
File numbering	Continuous
Dust Delete Data	Erased

Movie Shooting Settings	
AF mode	Live mode
AF w/ shutter button during '∰	Disable
¹ 層Shutter/AE lock button	AF/AE lock
'無Highlight tone priority	Disable
Movie recording size	Unchanged
Sound recording	On
Metering timer	16 sec.
Grid display	Off
Exposure compensation	Canceled
Auto Lighting Optimizer	Standard
Custom white balance	Canceled
Picture Style	Standard

MENU Turning the LCD monitor Off/On

The shooting settings display (p.46) can be turned on or off by pressing the shutter button halfway.

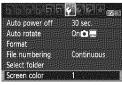


Under the [\P ²] tab, select [LCD off/on btn], then press <@> . The available settings are described below. Select one, then press <@> >.

- [Shutter btn.]: When you press the shutter button halfway, the display will turn off. And when you let go of the shutter button, the display will turn on.
- [Shutter/DISP]: When you press the shutter button halfway, the display will turn off. And when you let go of the shutter button, the display will remain off. To turn on the display, press the <DISP.> button.
- [Remains on]: Display remains on even when you press the shutter button halfway. To turn off display, press the < DISP.> button.

MENU Changing the Shooting Settings Screen Color

You can change the background color of the shooting settings screen.



 Under the [\P '] tab, select [Screen color], then press <@ \mathbb{E}) > . Select the desired color, then press <@ \mathbb{E}) >.

When you exit the menu, the selected color will be displayed for the shooting settings screen.



■■ Setting the Flash *

The built-in flash and external Speedlite settings can be set with the camera's menu. You can use the camera's menu to set the external Speedlite function settings only if the attached EX-series Speedlite is compatible with this function.

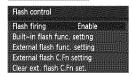
The setting procedure is the same as setting a camera menu function.



Select [Flash control].

- Under the [at] tab, select [Flash] control], then press < Fir)>.
- The flash control screen will appear.

[Flash firing]



- Normally, set this to [Enable].
- If [Disable] is set, neither the builtin flash nor the external Speedlite will fire. This is useful when you only want to use the flash's AF-assist beam.

[Built-in flash func. setting] and [External flash func. setting]

With [Built-in flash func. setting] and [External flash func. setting], you can set the functions listed on the next page. The functions displayed under [External flash func. setting] will vary depending on the Speedlite model.



- Select [Built-in flash func. setting] or [External flash func. setting].
- The flash functions will be displayed. The functions not dimmed can be selected and set.



Even if [Flash firing] has been set to [Disable], if focus is difficult to achieve in low light, the built-in flash may still fire a series of flashes (AF-assist beam. p.84).

[Built-in flash func. setting] and [External flash func. setting] Settable Functions

Function	[Built-in flash func. setting]	[External flash func, setting]	Page
Flash mode	E-TTL II (Fixed)	0	168
Shutter sync.			169
FEB*	_	0	-
Flash exposure compensation	0		102
E-TTL II meter.			169
Zoom*	_	0	_
Wireless setting*	_	0	

^{*} Regarding [FEB] (Flash exposure bracketing), [Zoom], and [Wireless set.], refer to the Speedlite's instruction manual.

Flash mode With an external Speedlite, you can select the flash mode suiting your objective.



- [E-TTL II] is the standard mode of EX-series Speedlites for automatic flash shooting.
- [Manual flash] enables you to set the flash output yourself. This is for advanced users.
- For other flash modes, refer to your Speedlite's instruction manual.

Shutter sync.

Normally, set this to [1st curtain] so that the flash fires immediately after the exposure starts.

If [2nd curtain] is set, the flash will fire right before the exposure ends. When this is combined with a slow sync speed, you can create a trail of light such as from car headlights at night. With 2nd-curtain sync, a preflash is fired when you press the shutter button completely. This is to determine the exposure. Then immediately before the exposure ends, the real flash is fired. Therefore, two flashes will be fired. However, with shutter speeds faster than 1/30 sec., 1st curtain sync will automatically take effect. If an external Speedlite is attached, you can also set [Hi-speed]. For details, see the Speedlite's instruction manual.

- Flash exposure compensation
 See "52 Flash Exposure Compensation" on page 102.
- E-TTL II flash metering For normal flash exposures, set it to [Evaluative]. [Average] is for advanced users. As with an external Speedlite, the metering area is averaged. Flash exposure compensation may be necessary.
- Clear flash settings On the [External flash func. setting] screen, press the <DISP.> button to display the screen to clear the flash settings. When you select [OK], the settings for the built-in flash and external Speedlite will be cleared.

Setting the External Speedlite Custom Functions

The Custom Functions displayed under [External flash C.Fn setting] will vary depending on the Speedlite model.



1:Disabled

Display the Custom Function.

Select [External flash C.Fn setting], then press <(ET)>.

Set the Custom Function.

- Press the < ▼►> key to select the function number, then set the function. The procedure is the same as setting the camera's Custom Functions (p.216).
- To clear all the Custom Function settings, select [Clear ext. flash C.Fn set.] in step 1.

MENU Appending Dust Delete Data ★

Dust entering the camera can adhere to the image sensor and cause dust spots to be visible on the captured images. To erase these dust spots, you can append the Dust Delete Data to the images. The Dust Delete Data is used by Digital Photo Professional (provided software, p.270) to erase the dust spots automatically.

Preparation

- Get a solid-white object (paper, etc.).
- Set the lens focal length to 50mm or longer.
- Set the lens focus mode switch to <MF> and set the focus to infinity (∞). If the lens has no distance scale, look at the front of the lens and turn the focusing ring clockwise all the way.

Obtain the Dust Delete Data





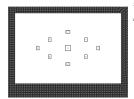
Under the [☐:] tab, select [Dust Delete Data], then press < (□)>.





Select [OK], then press < (ET) >.
Instructions will appear.







Photograph a solid-white object.

- At a distance of 20 cm 30 cm (0.7 ft. 1.0 ft.), fill the viewfinder with a patternless, solid-white object and take a picture.
- The picture will be taken in aperturepriority AE mode at an aperture of f/22.
- Since the image will not be saved, the data can still be obtained even if there is no card in the camera.
- When the picture is taken, the camera will start collecting the Dust Delete Data. When the Dust Delete Data is obtained, a message will appear. Select [OK], and the menu will reappear.
- If the data was not obtained successfully, a message to that effect will appear. Follow the "Preparation" procedure on the preceding page, then select [OK]. Take the picture again.

About the Dust Delete Data

After the Dust Delete Data is obtained, it is appended to all the JPEG and RAW images captured thereafter. Before an important shoot, you should update the Dust Delete Data by obtaining it again.

For details about using Digital Photo Professional (provided software, p.270) to erase dust spots, see the Software Instruction Manual (p.272) in the Software Instruction Manual CD-ROM.

The Dust Delete Data appended to the image is so small that it hardly affects the image file size.



Be sure to use a solid-white object such as a new sheet of white paper. If the paper has any pattern or design, it may be recognized as dust data and affect the accuracy of the dust deletion with the software.

MENU Manual Sensor Cleaning [★]

If dust adhere to the image sensor and dust spots appear on the images, you can clean the image sensor yourself with a camera blower. The surface of the image sensor is extremely delicate. If the sensor needs to be cleaned directly, having it done by a Canon Service Center is recommended.

Before cleaning the sensor, detach the lens from the camera.



Select [Clean manually].

Under the [¥:] tab, select [Clean manually], then press < @ >.



Select [OK].

- Select [OK], then press <@>>.
- In a moment, the reflex mirror will lockup and the shutter will open.
- Clean the sensor.
- End the cleaning.
 - Set the power switch to <OFF>.



- For the power source, using AC Adapter Kit ACK-E10 (sold separately) is recommended.
- If you use a battery, make sure it is fully recharged.



- While cleaning the sensor, never do any of the following. If the power is cut off, the shutter will close and the shutter curtains and image sensor might get damaged.
 - . Setting the power switch to <OFF>.
 - . Opening the card/battery compartment cover.
- The surface of the image sensor is extremely delicate. Clean the sensor with care.
- Use a plain blower without any brush attached. A brush can scratch the sensor
- Do not insert the blower tip inside the camera beyond the lens mount. If the power is turned off, the shutter will close and the shutter curtains or reflex mirror might get damaged.
- Never use canned air or gas to clean the sensor. The blowing force can damage the sensor or the spray gas can freeze on the sensor.
- If the battery level becomes low while you clean the sensor, the beeper will sound as a warning. Stop cleaning the sensor.
- If a smudge that cannot be removed with a blower remains, having the sensor cleaned by a Canon Service Center is recommended.

Image Playback

This chapter explains features related to viewing photos and movies, going into more detail than in Chapter 2 "Basic Shooting and Image Playback." Here you will find explanations about how to playback and erase photos and movies with the camera and viewing them on a TV set.

About images taken with another camera:

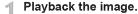
The camera might not be able to properly display images captured with a different camera or edited with a computer or whose file name was changed.

▶ Searching for Images Quickly

Display Multiple Images on One Screen (Index display)

Search for images quickly with the index display showing four or nine images on one screen.





When you press the < ▶> button, the last image captured will be displayed.



Switch to the index display.

- Press the < □ □ > button.
- The 4-image index display will appear. The currently-selected image will be highlighted in a blue frame.
- Press the < ■·Q > button again to switch to the 9-image index display.
- Pressing the <[®] > button will switch the display between 9 images, 4 images and one image displayed.









Select an image.

- Press the < +> key to move the blue frame to select an image.
- Turning the < > dial will display the next screen or previous image.
- Press < (ET) > and the selected image will be displayed as a single image.

With the single image display, you can turn the < > color > dial to jump through the images forward or back according to the jump method that was set.



Jump 10 images	
	ď
CTD.	Æ
mi mi	a
:100	
ಡ	$q \star$



Jump method

Playback position

🬓 Select [lmage jump w/ 🕰].

Under the [►] tab, select [Image jump w/ △], then press < □>.

Select the jump method.

- Press the <♠> key to select the jump method, then press <€x>>.
 - **付: Display images one by one**
 - ₁் Jump 10 images
 - ‰: Jump 100 images
 - ⊗: Display by date
 - ☆: Display by folder

 - ផ្ល: Display stills only
 - ☆: Display by image rating (p.180) Turn the < △ > dial to select the rating.

Browse by jumping.

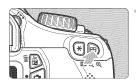
- Press the < >> button to playback images.
- On the single-image display, turn the < ☆ > dial.

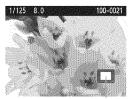


- To search images according to the shooting date, select [Date].
- To search images according to folder, select [Folder].
- If the card contains both [Movies] and [Stills], select either one to display only movies or stills.
- If no images match the selected [Rating], browsing through the images with < > is not possible.

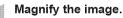
⊕/Q Magnified View

You can magnify a shot image by 1.5x to 10x on the LCD monitor.

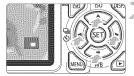


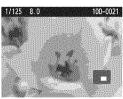


Magnified area position



- During image playback, press the
 + button.
- The image will be magnified.
- If you hold down the <^Q > button, the image will be magnified until it reaches the maximum magnification.
- Press the < ⋈ <> button to reduce the magnification. If you hold down the button, the magnification will be reduced to the single image display.





Scroll around the image.

- Use the < \(\ldots \) key to scroll around the magnified image.</p>
- To exit the magnified display, press the < >> button and the single image display will return.



- You can turn the < >> dial to view another image while the magnification is maintained.
- The image cannot be magnified during the image review immediately after shooting.
- A movie cannot be magnified.

Rotating the Image

You can rotate the displayed image to the desired orientation.



Select [Rotate].

Under the [] tab, select [Rotate], then press < (FT) >.



Select an image.

- Press the < ◄►> key to select the image to be rotated.
- You can also select an image on the index display (p.176).



Rotate the image.

- Each time you press < (FT)>, the image will rotate clockwise as follows: $90^{\circ} \rightarrow 270^{\circ} \rightarrow 0^{\circ}$
- To rotate another image, repeat steps 2 and 3.
- To exit and return to the menu, press the <MFNU> button.

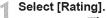


- vertical shots, you need not rotate the image as described above.
 - If the rotated image is not displayed in the rotated orientation during image playback, set [Y Auto rotate] to [On D].
 - A movie cannot be rotated.

Setting Ratings

You can rate images and movies with one of five rating marks: [+]/[++]/ [*]/[**]/[**].





Under the [] tab, select [Rating], then press < (ET) >.



Select an image or movie.

- Press the <◀►> key to select the image or movie to be rated.
- You can display three images by pressing the < □ Q > button. To return to the single-image display, press the < @ > button.



Rate the image or movie.

- mark
- The total number of images and movies rated will be counted for each rating.
- To rate another image or movie, repeat steps 2 and 3.
- To exit and return to the menu, press the <MFNU> button.



The number next to the rating marks ([-]/[-]/[-]/[-]/[-]) can only go up to 999. If there are 1,000 or more images for a rating, [###] will be displayed.

Taking advantage of ratings

- With the [∑ Image jump wl △] option, you can display only the rated images and movies.
- With the [☐ Slide show] option, you can playback only the rated images and movies.
- With Digital Photo Professional (provided software, p.270), you can select only the rated images and movies.
- With Windows Vista and Windows 7, you can see the rating with the file information display or the provided image viewer.

Quick Control During Playback

When you press the < | > button during image playback, you can set the following: [• Protect images,
Rotate, Rating, Milmage iump w/ 2 1. Note that movies cannot be rotated (Rotate).





Press the <Q> button.

- During image playback, press the <Q> button.
- The functions settable with Quick Control will appear on the left of the screen

Select a function and set it.

- Press the < ▲▼ > kev to select a function.
- The name and current setting of the selected function are displayed at the bottom
- Set it by pressing the < ◀►> key.

Exit the setting.

Press the <Q > button to turn off the Quick Control icons and function settings.



To rotate an image, set [Y Auto rotate] to [On ■]. If [Y Auto rotate] is set to [On] or [Off], the [Rotate] setting will be recorded to the image, but the camera will not rotate the image for display.



- Pressing the <Q > button during the index display will switch to the single-image display and the Quick Control icons will appear. Pressing the <Q> button again will return to the index display.
 - For images taken with another camera, selectable functions may be limited.

'M Enjoying Movies

Basically, you can playback movies in the following three ways:

Playback on a TV set

(p.191)



An HDMI cable (sold separately) is necessary to connect the camera to a TV set. The TV set must also have an HDMI terminal.

When the camera is connected to a TV set with an HDMI cable, you can playback movies and still photos on the TV set. If you use a High-Definition TV set to playback High-Definition (HD) movies shot with this camera, you can watch the movies in high definition.



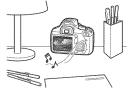
- The camera does not have an audio/video OUT terminal. Therefore, the camera cannot be connected to a TV set with an analog AV cable.
 - Movies on a card can be played only by devices compatible with MOV files
 - Since hard disk recorders do not have an HDMI IN terminal, the camera cannot be connected to a hard disk recorder with an HDMI cable.
 - Even if the camera is connected to a hard disk recorder with a USB cable, movies and still photos cannot be played nor saved.



Using HDMI Cable HTC-100 (sold separately) is recommended.

Playback on the Camera's LCD Monitor

(p.186-190)



You can playback movies on the camera's LCD monitor. You can also edit out the movie's first and last scenes, and playback the images and movies in the card in an automatic slide show.



A movie edited with a personal computer cannot be rewritten to the card and played back with the camera.

Playback and Editing with a Personal Computer

(See the PDF file instruction manual for ZoomBrowser EX/ImageBrowser, p.272)



The movie files recorded in the card can be transferred to a personal computer and played or edited with ZoomBrowser EX/ImageBrowser (provided software, p.270).

You can also extract a single frame from a movie and save it as a still photo.



- To have the movie playback smoothly on a personal computer, use a high-performance personal computer. Regarding the computer hardware requirements for ZoomBrowser EX/ImageBrowser, see the PDF file instruction manual.
- If you want to use commercially-available software to playback or edit the movies, be sure it is compatible with MOV files. For details on commercially-available software, inquire the software maker.

Movies !!









Speaker



Playback the image.

Press the <►> button to display images.

Select a movie.

- Press the <◀►> key to select a movie
- On the single-image display, the
 Image: single-image displayed on the upper left indicates a movie.
- On the index display, the perforation on the left edge of the image indicates a movie. As movies cannot be played on the index display, press <</p>
 ** to switch to the single-image display.

On the single-image display, press <(i)>.

The movie playback panel will appear on the bottom.

Playback the movie.

- Select [▶] (Play), then press <
 □

 Select [▶].
 </p>
- The movie will start playing.
- You can pause the movie playback by pressing <(ET)>.
- During movie playback, you can turn the < >> dial to adjust the built-in speaker's sound volume.
- For more details on the playback procedure, see the next page.

Function	Playback Description
⇒ Exit	Returns to the single-image display.
► Play	Pressing <। > toggles between play and stop.
I► Slow motion	Adjust the slow motion speed by pressing the <◀►> key. The slow-motion speed is indicated on the upper right.
₩ First frame	Displays the movie's first frame.
Il Previous frame	Each time you press <(), a single previous frame is displayed. If you hold down <(), it will rewind the movie.
II▶ Next frame	Each time you press $<$ (\oplus)>, the movie will play frame-by-frame. If you hold down $<$ (\oplus)>, it will fast forward the movie.
₩ Last frame	Displays the movie's last frame.
% Edit	Displays the editing screen (p.188).
	Playback position
mm' ss"	Playback time (minutes:seconds)
⊿ Volume	You can adjust the built-in speaker's (p.186) sound volume by turning the <ॎऀ> dial.



- With a fully-charged Battery Pack LP-E10, the continuous playback time at 23°C/73°F will be as follows: Approx. 4 hr.
 - During the single-image display, you can press the <DISP.> button to change the display format (p.199).
 - If you connect the camera to a TV set (p.184, 191) to playback a movie, adjust the sound volume with the TV set. (Turning the <a>> dial will not adjust the sound volume.)
 - This camera cannot playback Full High-Definition (Full HD) or High-Definition (HD) movies (60/50 fps frame rate) taken with another EOS camera. This camera can only playback High-Definition (HD) and Standard-Definition (SD) movies having a 30/25 fps frame rate.

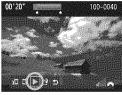
★ Editing a Movie's First and Last Scenes

You can edit out the first and last scenes of a movie in 1-sec. increments.











On the movie playback screen, select [%].

 $\,\,$ The editing screen will be displayed.

Specify the part to be edited out.

- Select either [¾☐] (Cut beginning) or [☐¼] (Cut end), then press <€□>.
- Press the < P> key to see the previous or next frames. Holding it down will fast forward the frames.
- After deciding which part to edit out, press <(i)>. The portion highlighted in blue on the top of the screen is what will remain.

Check the edited movie.

- To change the editing, go back to step 2.
- To cancel the editing, select [♠] and press <(str)>.

Save the movie.

- Select [], then press < =>.
- The save screen will appear.
- To save it as a new movie, select [New file]. To save it and overwrite the original movie file, select [Overwrite]. Then press <(xi)>.



- Since the editing is done in 1-sec. increments (position indicated by [X]), the exact position where the movie is edited may differ slightly from the position you specified.
- If the card does not have enough room, [New file] will not be selectable.
- More movie editing functions are available with ZoomBrowser EX/ ImageBrowser (provided software, p.270).

Slide Show (Auto Playback)

You can playback the images in the card as an automatic slide show.



Number of images to be played









Select [Slide show].

● Under the [➡] tab, select [Slide show], then press < FT)>.

Select the images to be played.

Press the < ▲▼ > key to select the desired option, then press < (ET) >.

[All images/Movies/Stills]

 Press the < ▲▼ > key to select one of the following: [All images/ Movies/ Stills]. Then press < (ser) >.

[Date/Folder/Rating]

- Press the < AV > key to select one of the following: [Date/ Folder/ Rating].
- When < DISP. √D > is highlighted. press the <DISP.> button.
- Press the < ▲▼ > kev to select the desired option, then press < (ET) >.

Item	Playback Description
All images	All the still photos and movies in the card will be played back.
⊞ Date	Still photos and movies taken on the selected shooting date will be played back.
Folder	Still photos and movies in the selected folder will be played back.
'們 Movies	Only the movies in the card will be played back.
r∆ Stills	Only the still photos in the card will be played back.
★ Rating	Only the still photos and movies with the selected rating will be played back.



Set [Set up] as desired.

- Press the <▲▼> key to select [Set up], then press <(ET)>.
- Set the [Display time] (still photos), [Repeat], and [Transition effect].
- Then press the <MENU> button.





[Transition effect]









Start the slide show.

- Press the < ▲▼ > key to select [Start], then press < (xi)>.
- After [Loading image...] is displayed, the slide show will start.

Quit the slide show.

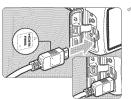
To quit the slide show and return to the setting screen, press the <MENU> button.



- To pause the slide show, press <(xi)>. During pause, [II] will be displayed on the upper left of the image. Press <(xi)> again to resume the slide show.
- During auto playback, you can press the <DISP.> button to change the still photo display format (p.70).
- During movie playback, you can adjust the sound volume by turning the
- During pause, you can press the < ◆ > key to view another image.
- During the slide show, auto power off will not take effect.
- The display time may vary depending on the image.
- To view the slide show on a TV set, see pages 191-193.

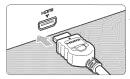
Playback on a High-Definition TV

An HDMI cable (sold separately) is necessary to connect the camera to a TV set. The TV set must also have an HDMI terminal. When the camera is connected to a TV set with an HDMI cable, you can playback movies and still photos on the TV set. If you use a High-Definition TV set to playback High-Definition (HD) movies shot with this camera, you can watch the movies in high definition.



Connect the HDMI cable to the camera.

With the plug's < ▲ HDMI MINI> logo facing the front of the camera, insert it into the <HDMI OUT > terminal.

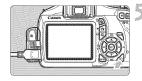


Connect the HDMI cable to the TV set.

- Connect the HDMI cable to the TV's HDMI IN port.
- Turn on the TV and switch the TV's video input to select the connected port.
- Set the camera's power switch to <0N>.



- Adjust the movie's sound volume with the TV set. The sound volume cannot be adjusted with the camera.
 - Before connecting or disconnecting the cable between the camera and television, turn off the camera and TV set.
 - Depending on the TV set, part of the image displayed might be cut off.



Press the < > > button.

- The image will appear on the TV screen (Nothing will be displayed on the camera's LCD monitor).
- The images will automatically be displayed at the TV's optimum resolution.
- By pressing the <DISP.> button, you can change the display format.
- To playback movies, see page 186.



- □ Do not connect any other device's output to the camera's < HDMI OUT > terminal. Doing so may cause a malfunction.
 - Certain TVs might not be able to playback the captured images.

Using HDMI CEC TV Sets

If the TV set connected to the camera with an HDMI cable is compatible with HDMI CEC*, you can use the TV set's remote control for playback operations.

* An HDMI-standard function enabling HDMI devices to control each other so that you can control them with one remote control unit.



Set [Ctrl over HDMI] to [Enable].

- Under the [] tab, select [Ctrl over...] HDMII, then press < fir>.
 - Select [Enable], then press < (ET) >.

Connect the camera to a TV set.

- Use an HDMI cable to connect the camera to the TV.
- The TV's input will switch automatically to the HDMI port connected to the camera.

Press the camera's <▶> button.

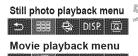
An image will appear on the TV screen and you can use the TV's remote control to playback images.

Select an image or movie.

Point the remote control toward the TV set and press the ←/→ button to select an image.

Press the remote control's Enter button.

- The menu appears and you can do the playback operations shown on the left.
- Press the ←/→ button to select the desired option, then press the Enter button. For a slide show, press the remote control's 1/4 button to select an option, then press the Enter button
- If you select [Return] and press the Enter button, the menu will disappear and you can use the ←/→ button to select an image.



· Return

: 9-image index

25 : Plav movie 4 Slide show

DISP.: Disp. shooting info

তি : Rotate



- Some TV sets require you to first enable the HDMI CEC connection. For details, see the TV set's instruction manual.
 - Certain TV sets, even those compatible with HDMI CEC, may not operate properly. In such a case, disconnect the HDMI cable, set [] Ctrl over HDMI] to [Disable], and use the camera to control the playback operation.

Protecting Images

Protecting an image prevents it from being erased accidentally.

MENU Protecting a Single Image





Image protect icon



Select [Protect images].

- Under the [➡] tab, select [Protect images], then press <(♠)>.
- The protect setting screen will appear.

Select [Select images].

Select [Select images], then press <(ET)>.

Protect the image.

- Press the <◄►> key to select the image to be protected, then press <(€f)>.
- When an image is protected, the < > icon will appear on the top of the screen.
- To cancel the image protection, press ⟨⊕⟩ again. The ⟨━⟩ icon will disappear.
- To protect another image, repeat step3.
- To exit the image protection, press the <MENU> button. The menu will reappear.

MENU Protecting All Images in a Folder or Card

You can protect all the images in a folder or card at one time.



When you select [All images in folder] or [All images on card] in [五] Protect images], all the images in the folder or card will be protected.

To cancel the image protection, select [Unprotect all images in folder] or [Unprotect all images on card].



If you format the card (p.44), the protected images will also be erased.



- Movies can also be protected.
- Once an image is protected, it cannot be erased by the camera's erase function. To erase a protected image, you must first cancel the protection.
- If you erase all the images (p.197), only the protected images will remain. This is convenient when you want to erase unnecessary images all at once.

而 Erasing Images

You can either select and erase images one by one or erase them in one batch. Protected images (p.194) will not be erased.

Once an image is erased, it cannot be recovered. Make sure you no longer need the image before erasing it. To prevent important images from being erased accidentally, protect them. Erasing a AW+ L image will erase both the AW and ▲L images.

Erasing a Single Image



Playback the image to be erased.

Press the < m > button.

The erase dialog will appear at the bottom of the screen

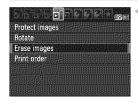
Erase the image.

Select [Erase], then press <(ET)>. The image displayed will be erased.



MENU Checkmarking <√> Images to be Erased in a Batch

By checkmarking the images to be erased, you can erase multiple images at one time.



Select [Erase images].

Under the [] tab, select [Erase images], then press < (117)>.







Select [Select and erase images].

- Select [Select and erase images]. then press < (FT) >.
- The images will be displayed.
- To display the three-image display, press the < < □ > button. To return to the single-image display, press the < D > hutton

Select the images to be erased.

- Press the < ◄►> key to select the image to be erased, then press the < **▲♥** > kev.
- A < √ > checkmark will be displayed on the upper left.
- To select other images to be erased, repeat step 3.

Erase the images.

- Press the < m̄ > button.
- Select [OK], then press < (ET) >.
- The selected images will be erased.

MENU Erasing All Images in a Folder or Card

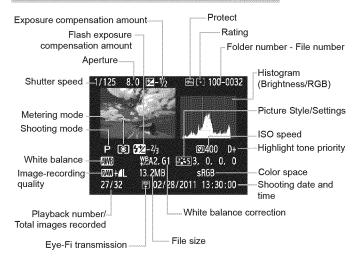
You can erase all the images in a folder or card at one time. When [] Erase images] is set to [All images in folder] or [All images on card], all the images in the folder or card will be erased.



To also erase protected images, format the card (p.44).

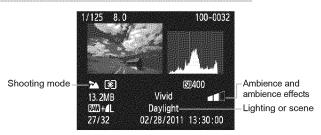
DISP. Shooting Information Display

Sample Image Taken in a Creative Zone Mode



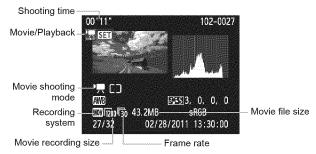
- * With WW+ L images, the W file size is displayed.
- * Photos taken with flash without any flash exposure compensation are marked with the < 12 > icon. Photos taken with flash exposure compensation are marked with the < 12 > icon.

Sample Image Taken in a Basic Zone Mode



- * For images taken in Basic Zone modes, the information displayed may differ depending on the shooting mode.
- * Photos taken in the < (A) > mode will show [Background blur].

Sample Movie Taken in Movie Mode



* The shutter speed, aperture, and ISO speed will not be displayed.

About the Highlight Alert

When the shooting information is displayed, any overexposed areas of the image will blink. To obtain more image detail in the overexposed areas, set the exposure compensation to a negative amount and shoot again.

About the Histogram

The brightness histogram shows the exposure level distribution and overall brightness. The RGB histogram is for checking the color saturation and gradation. The display can be switched with [Σ^t Histogram].

[Brightness] Display

This histogram is a graph showing the distribution of the image's brightness level. The horizontal axis indicates the brightness level (darker on the left and brighter on the right), while the vertical axis indicates how many pixels exist for each brightness level. The more pixels there are toward the left, the darker the image. And the more pixels there are toward the right, the brighter the image. If there are too many pixels on the left, the shadow detail will be lost. And if there are too many pixels on the right, the highlight detail will be lost. The gradation in-between will be reproduced. By checking the image and its brightness histogram, you

Sample Histograms







can see the exposure level inclination and the overall gradation.

[RGB] Display

This histogram is a graph showing the distribution of each primary color's brightness level in the image (RGB or red, green, and blue). The horizontal axis indicates the color's brightness level (darker on the left and brighter on the right), while the vertical axis indicates how many pixels exist for each color brightness level. The more pixels there are toward the left, the darker and less prominent the color. And the more pixels there are toward the right, the brighter and denser the color. If there are too many pixels on the left, the respective color information will be lacking. And if there are too many pixels on the right, the color will be too saturated with no detail. By checking the image's RGB histogram, you can see the color's saturation and gradation condition and white balance inclination.



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This Instruction Manual booklet is current as of January 2011. For information on the camera's compatibility with any accessories and lenses introduced after this date, contact any Canon Service Center.